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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,671	10/16/2003	Monica M. Marugan	GEPL.P-077	2670
21121	7590	03/01/2006	EXAMINER	
OPPEDAHL AND LARSON LLP			ZIMMER, MARC S	
P O BOX 5068				
DILLON, CO 80435-5068			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/605,671	Applicant(s) MARUGAN ET AL.	
	Examiner Marc S. Zimmer	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-28,31,33-45 and 62-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9,10,12-18,20-23,26-28,31,33-37,39-42,45,62-65 and 67-69 is/are rejected.
- 7) ☒ Claim(s) 11,19,24,25,38,43,44,66,70 and 71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Based on an indication of allowable subject matter in claim 8, Applicant has incorporated the limitations of claims 7 and 8 into claim 1. Upon careful reconsideration of this and other subject matter deemed patentable in the last correspondence, it has been concluded that the limitations of claim 8 and, for that matter, many of the other claims cannot represent a basis for patentability for the reasons delineated *infra*. The Examiner sincerely regrets any inconvenience to Applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-10, 12-18, 20-22, 31, 33-37, 39-41, 62-65, and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al., U.S. Patent # 5,451,632 in view of Lo et al., U.S. Patent # 5,804,654 and/or Falcone et al., U.S. Patent Application Publication No. 2002/0019466. Okumura et al. is relevant for all the reasons provided in the previous correspondence. The reference does, not however, make even cursory mention of an anti-drip agent which, in the Examiner's estimation is surprising insofar as flame resistance is one of the primary characteristics targeted by the composition that represents their invention. Given that a flame-resistant polymer is sought, it seems evident that the polymer is to be used in environments where it potentially is subjected to

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fire/elevated temperatures. In view of this, it is the Examiner's contention that the incorporation of an anti-drip agent would be an obvious modification of the prior art invention. In the absence of any indication as to what anti-drip additives are suitable, the skilled artisan would have consulted the related prior art to ascertain what materials are employed in this capacity.

There are documents numbering in the hundreds that contemplate using polytetrafluorethylene (PTFE) as an anti-drip agent. However, it is documented in Lo et al. and elsewhere that PTFE aggregates when blended into polycarbonate matrices thereby having a deleterious effect on the mechanical properties of the polymer. (The aggregates are actually referred to in *Lo* as "networks" in column 1, line 24.) To address this matter, *Lo* teaches the preparation of styrene-acrylonitrile-encapsulated PTFE (column 4, lines 20-22) that acquires the form of a free flowing polymer that, when blended into a thermoplastic, does not adversely affect the mechanical properties and, further, even provides an enhancement in flame-resistance (column 1, lines 32-39). *Falcone* (Example 1) indicates that the incorporation of these copolymers as anti-drip agents is now conventional. Accordingly, this aspect of the invention is obvious.

Concerning claims 10, 18, 37, and 65, alkali metal- and alkaline earth metal salts of numerous acids including phosphoric acid as flame retardants in column 16, lines 23-35.

Claims 23, 26-28, 42, and 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al., U.S. Patent # 5,451,632 in view of Brand, U.S.

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patent # 4,357,170 and/or Nelson, U.S. Patent # 3,542,575. In column 12, line 58, Okamura contemplates using polyol as a dispersing aid for titanium oxide but does not volunteer any examples of the polyol. Nevertheless, it is well-established that trimethylolpropane is exemplary of the polyols employed for this purpose as is illustrated by its mention in Brand (claim 11), Nelson (column 4, lines 29-34), and others.

Allowable Subject Matter

Claims 4-5, 11, 19, 38, 43-44, 66, and 70-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. One of the primary reasons that Okamura contemplates incorporating siloxane blocks into polymers where polycarbonate homopolymer is typically employed is for enhanced impact resistance. It appears that desirable levels of impact resistance are achieved by this approach alone and, hence, it is the Examiner's position that it would not be obvious to add rubbery impact modifiers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

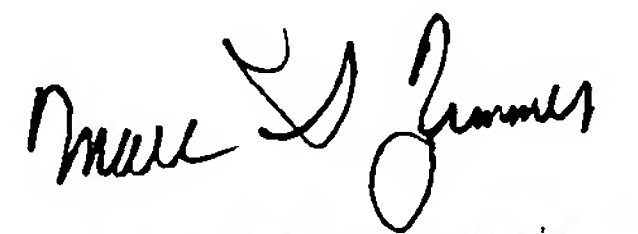
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 24, 2006


MARC S. ZIMMER
PRIMARY EXAMINER